PCT/US2004/032649

31

WHAT IS CLAIMED IS:

WO 2005/033341

- 1. A method of detecting a neurodegenerative disease in a mammal, which method comprises assaying the copy number of a *Cripto-1* gene or the expression level of a *Cripto-1* gene product in the central nervous system of the mammal, wherein an amplification of the *Cripto-1* gene or an overexpression of the *Cripto-1* gene product is indicative of a neurodegenerative disease in the mammal.
- 2. The method of claim 1, wherein the neurodegenerative disease is selected from the group consisting of NeuroAIDS, Alzheimer's disease, multiple sclerosis, amyotrophic lateral sclerosis (ALS), Parkinson's disease, and encephalitis.
 - 3. The method of claim 1 or 2, wherein the mammal is a human.
- 4. The method of any of claims 1-3, wherein the method comprises using a cDNA array and/or comprises non-quantitative reverse transcription-polymerase chain reaction (RT-PCR).
- 5. The method of claim 4, wherein the RT-PCR is carried out with oligonucleotide probes consisting essentially of the nucleotide sequences AAGCTATGGACTGCAGGAAGATGG (SEQ ID NO: 3) and AGAAAGGCAGATGCCAACTAGC (SEQ ID NO: 4).
- 6. The method of any of claims 1-5, wherein the expression level of a *Cripto-1* gene product is assayed from cerebrospinal fluid obtained from the mammal.
- 7. A method of inhibiting progression of a neurodegenerative disease in a mammal, which method comprises administering to the mammal an agent that inhibits Cripto-1 in an amount effective to inhibit Cripto-1 in the central nervous system of the mammal, whereupon the progression of the neurodegenerative disease is inhibited.
- 8. The method of claim 7, wherein the neurodegenerative disease is selected from the group consisting of NeuroAIDS, Alzheimer's disease, multiple sclerosis, ALS, Parkinson's disease, and encephalitis.
 - 9. The method of claim 7 or 8, wherein the mammal is a human.

PCT/US2004/032649

- 10. The method of any of claims 7-9, wherein the agent is an oligonucleotide that hybridizes to a nucleic acid molecule encoding a Cripto-1 protein.
- 11. The method of any of claims 7-9, wherein the agent is an antibody that specifically binds to a Cripto-1 protein.
- 12. The method of any of claims 7-9, wherein the agent is a peptide that specifically binds to a Cripto-1 protein.
- 13. The method of any of claims 7-9, wherein the agent is a mutant Cripto-1 protein.
- 14. An isolated or purified oligonucleotide consisting essentially of the sequence of AAGCTATGGACTGCAGGAAGATGG (SEQ ID NO: 3) or AGAAAGGCAGATGCCAACTAGC (SEQ ID NO: 4).